

NANOMETRICS INC

FORM DEFA14A

(Additional Proxy Soliciting Materials (definitive))

Filed 04/11/16

Address	1550 BUCKEYE DRIVE MILPITAS, CA 95035
Telephone	408-435-9600
CIK	0000704532
Symbol	NANO
SIC Code	3829 - Measuring and Controlling Devices, Not Elsewhere Classified
Industry	Semiconductors
Sector	Technology
Fiscal Year	12/27

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934
(Amendment No. __)

Filed by the Registrant
Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

NANOMETRICS INCORPORATED

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box)

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

1. Title of each class of securities to which transaction applies:

2. Aggregate number of securities to which transaction applies:

3. Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

4. Proposed maximum aggregate value of transaction:

5. Total fee paid:

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

6. Amount Previously Paid:

7. Form, Schedule or Registration Statement No.:

8. Filing Party:

9. Date Filed:

EXPLANATORY NOTE

The Notice of Availability of Proxy Materials and proxy card for the Nanometrics Incorporated 2016 Annual Meeting of Stockholders are being refiled to correct a typographical error contained in the previously filed versions of each of these documents.

***** Exercise Your *Right to Vote* *****
**Important Notice Regarding the Availability of Proxy Materials for the
Stockholder Meeting to Be Held on May 24, 2016.**

NANOMETRICS INCORPORATED

Meeting Information

Meeting Type: Annual Meeting
For holders as of: March 30, 2016
Date: May 24, 2016 **Time:** 9:00 AM local time
Location: Nanometrics Incorporated
1550 Buckeye Drive
Milpitas, CA 95035

NANOMETRICS INCORPORATED
1550 BUCKEYE DRIVE
MILPITAS, CA 95035

You are receiving this communication because you hold shares in the company named above.

This is not a ballot. You cannot use this notice to vote these shares. This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. You may view the proxy materials online at www.proxyvote.com or easily request a paper copy (see reverse side).

We encourage you to access and review all of the important information contained in the proxy materials before voting.

Directions to the annual meeting may be found on our website www.nanometrics.com by clicking on "Contact" then "Map & Local Driving Directions."

See the reverse side of this notice to obtain proxy materials and voting instructions.

— Before You Vote —
How to Access the Proxy Materials

Proxy Materials Available to VIEW or RECEIVE:

NOTICE AND PROXY STATEMENT ANNUAL REPORT

How to View Online:

Have the information that is printed in the box marked by the arrow → [XXXXXXXXXXXXXXXXXXXX] (located on the following page) and visit: www.proxyvote.com.

How to Request and Receive a PAPER or E-MAIL Copy:

If you want to receive a paper or e-mail copy of these documents, you must request one. There is NO charge for requesting a copy. Please choose one of the following methods to make your request:

- 1) BY INTERNET: www.proxyvote.com
- 2) BY TELEPHONE: 1-800-579-1639
- 3) BY E-MAIL*: sendmaterial@proxyvote.com

* If requesting materials by e-mail, please send a blank e-mail with the information that is printed in the box marked by the arrow → [XXXXXXXXXXXXXXXXXXXX] (located on the following page) in the subject line.

Requests, instructions and other inquiries sent to this e-mail address will NOT be forwarded to your investment advisor. Please make the request as instructed above on or before May 10, 2016, to facilitate timely delivery.

— How To Vote —

Please Choose One of the Following Voting Methods

Vote In Person: Many stockholder meetings have attendance requirements including, but not limited to, the possession of an attendance ticket issued by the entity holding the meeting. Please check the meeting materials for any special requirements for meeting attendance. At the meeting, you will need to request a ballot to vote these shares.

Vote By Internet: To vote now by Internet, go to www.proxyvote.com. Have the information that is printed in the box marked by the arrow → [XXXXXXXXXXXXXXXXXXXX] (located on the following page) available and follow the instructions.

Vote By Mail: You can vote by mail by requesting a paper copy of the materials, which will include a proxy card.

Voting Items

The Board of Directors recommends you vote FOR the following:

1. Election of Directors:

Nominees:

- 01) J. Thomas Bentley
- 02) Edward J. Brown Jr.
- 03) Bruce C. Rhine
- 04) Christopher A. Seams
- 05) Timothy J. Stultz PHD
- 06) Christine A. Tsingos

The Board of Directors recommends you vote FOR proposals 2, 3 and 4.

- 2. To approve, on an advisory basis, the compensation of Nanometrics' named executive officers, as disclosed in the proxy statement.
- 3. To approve an amendment and restatement of Nanometrics' 2003 Employee Stock Purchase Plan to increase the number of shares reserved for issuance under the plan by 500,000 shares.
- 4. To ratify the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 31, 2016.

NOTE: All directors are up for election and, if elected, will each serve for a term of one year or until his/her respective successor has been duly elected and qualified.

Directions to the annual meeting may be found at www.nanometrics.com by clicking on "Contact" then "Map & Local Driving Directions."

E07761-4792.83

NANOMETRICS INCORPORATED
1550 BUCKEYE DRIVE
MILPITAS, CA 95035

VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 PM Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 PM Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL


Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

E09186-P76283

KEEP THIS PORTION FOR YOUR RECORDS
 DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

NANOMETRICS INCORPORATED		For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.	
The Board of Directors recommends you vote FOR the following:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	
1. Election of Directors						
Nominees:						
01) J. Thomas Bentley						
02) Edward J. Brown Jr.						
03) Bruce C. Rhine						
04) Christopher A. Seams						
05) Timothy J. Stultz PhD						
06) Christine A. Tsingos						
The Board of Directors recommends you vote FOR proposals 2, 3 and 4.						
		For	Against	Abstain		
2.	To approve, on an advisory basis, the compensation of Nanometrics' named executive officers, as disclosed in the proxy statement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3.	To approve an amendment and restatement of Nanometrics' 2003 Employee Stock Purchase Plan to increase the number of shares reserved for issuance under the plan by 500,000 shares.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4.	To ratify the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 31, 2016.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
NOTE: All directors are up for election and, if elected, will each serve for a term of one year or until his/her respective successor has been duly elected and qualified.						
Directions to the annual meeting may be found at www.nanometrics.com by clicking on "Contact" then "Map & Local Driving Directions."						
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.						
<input type="text"/> Signature [PLEASE SIGN WITHIN BOX]		<input type="text"/> Date		<input type="text"/> Signature (Joint Owners)		<input type="text"/> Date

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:

The Notice and Proxy Statement and Annual Report are available at www.proxyvote.com.

E07757-P76283

**NANOMETRICS INCORPORATED
THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
ANNUAL MEETING OF STOCKHOLDERS
MAY 24, 2016**

The undersigned stockholder(s) of Nanometrics Incorporated, a Delaware corporation, hereby acknowledges receipt of the Notice of Annual Meeting of Stockholders and Proxy Statement, each dated April 4, 2016, and hereby appoints Bruce C. Rhine and Jeffrey Anderson, and each of them, as Proxies and Attorneys-in-Fact, with full power to each of substitution, on behalf and in the name of the undersigned, to represent the undersigned at the Annual Meeting of Stockholders of Nanometrics Incorporated to be held on Tuesday, May 24, 2016, at 9:00 a.m., local time, at Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, CA 95035 and at any adjournments thereof, and to vote all shares of common stock which the undersigned is entitled to vote on the matters set forth on the reverse side.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" PROPOSALS 1, 2, 3 AND 4.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side